

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for the recovery of a catalyst in a reaction using comprising boron trifluoride or its complex as the catalyst, wherein the process is characterized in that the process comprising:

separating a reaction product and a reaction solvent ~~are separated~~ after completion of the reaction, ~~by using a solvent containing~~
wherein the reaction solvent consists of a hydrofluorocarbon compound and/or an oxygenic hydrofluorocarbon compound ~~as the reaction solvent~~.

Claim 2 (Currently Amended): The process for the recovery according to Claim 1, wherein the reaction solvent ~~is a solvent containing~~ consists of a hydrofluorocarbon compound and/or an oxygenic hydrofluorocarbon compound with no ozone-depleting potential.

Claim 3 (Currently Amended): The process for the recovery according to Claim 1, wherein the reaction solvent ~~is a solvent containing~~ consists of a hydrofluorocarbon compound having an ether linkage.

Claim 4 (Currently Amended): The process for the recovery according to Claim 1, wherein the reaction solvent ~~is~~ consists of a mixed solvent further containing a hydrofluorocarbon compound and/or an oxygenic hydrofluorocarbon, and a fluorine compound with the specific gravity of 1.1 or more.

Claim 5 (Currently Amended): The process for the recovery according to Claim 1, wherein the hydrofluorocarbon compound ~~is~~ consists of a compound expressed by a composition formula $C_nH_mF_{2n-m+2}$ ($n = 3$ to 12, and $m = 1$ to $2n$), or a cyclic perfluorocarbon

compound with the number of carbon atoms of 12 or less in which fluorine atoms are partially substituted by hydrogen atoms.

Claim 6 (Currently Amended): The process for the recovery according to Claim 1, wherein the oxygenic hydrofluorocarbon compound ~~is~~ consists of a compound expressed by a composition formula $C_nH_mF_{2n-m+2}O$ ($n = 3$ to 12, and $m = 1$ to $2n$), or an oxygenic cyclic perfluorocarbon compound with the number of carbon atoms of 12 or less in which fluorine atoms are partially substituted by hydrogen atoms.

Claim 7 (Currently Amended): The process for the recovery according to Claim 1, wherein a complexing agent that forms a complex with boron trifluoride in the boron trifluoride complex ~~is~~ comprises a polar compound.

Claim 8 (Original): The process for the recovery according to Claim 7, wherein the complexing agent is selected from a group consisting of water, alcohols, ethers, phenols, amines, ketones, aldehydes, esters, acid anhydrides, and acids.

Claim 9 (Currently Amended): The process for the recovery according to Claim 1, wherein the boron trifluoride complex ~~is~~ consists of a boron trifluoride-ether complex.

Claim 10 (Currently Amended): The process for the recovery according to Claim 1, wherein the reaction ~~using~~ comprising boron trifluoride or its complex as a catalyst is a dimerization reaction, an oligomerization reaction, a condensation reaction, or a polymerization reaction of an olefin.

Claim 11 (Currently Amended): A process for recycling of a catalyst recovered from a reaction, characterized by the process comprising:

~~reusing adding~~ the catalyst recovered by the process according to any Claims 1 to 10 for to the reaction.

Claim 12 (Currently Amended): A process for the recovery of a catalyst in a reaction comprising boron trifluoride or its complex as a catalyst, ~~wherein the process is characterized in that the process comprising:~~

extracting boron trifluoride or its complex from a reaction product after completion of the reaction,

wherein ~~an extracting solvent for the extraction consists of~~ a hydrofluorocarbon compound and/or an oxygenic hydrofluorocarbon compound ~~is used as an extracting solvent~~.

Claim 13 (Original): The process for the recovery according to Claim 12, wherein, after boron trifluoride or its complex is extracted from the reaction product, the extract is separated into an extracting solvent and boron trifluoride or its complex by distillation.

Claim 14 (Currently Amended): The process for the recovery according to Claim 12, wherein the extracting solvent ~~is a solvent containing~~ consists of a hydrofluorocarbon compound and/or an oxygenic hydrofluorocarbon compound with no ozone-depleting potential.

Claim 15 (Currently Amended): The process for the recovery according to Claim 12, wherein the extracting solvent ~~is~~ consists of a mixed solvent further containing a hydrofluorocarbon compound and/or an oxygenic hydrofluorocarbon, and a fluorine compound with the specific gravity of 1.1 or more.

Claim 16 (Currently Amended): The process for the recovery according to Claim 12, wherein the hydrofluorocarbon compound ~~is~~ consists of a compound expressed by a composition formula $C_nH_mF_{2n-m+2}$ ($n = 3$ to 12, and $m = 1$ to $2n$), or a cyclic perfluorocarbon

compound with the number of carbon atoms of 12 or less in which fluorine atoms are partially substituted by hydrogen atoms.

Claim 17 (Currently Amended): The process for the recovery according to Claim 12, wherein the oxygenic hydrofluorocarbon compound is consists of a compound expressed by a composition formula $C_nH_mF_{2n-m+2}O$ ($n = 3$ to 12, and $m = 1$ to $2n$), or an oxygenic cyclic perfluorocarbon compound with the number of carbon atoms of 12 or less in which fluorine atoms are partially substituted by hydrogen atoms.

Claim 18 (Currently Amended): The process for the recovery according to Claim 12, wherein the extracting solvent is ~~a solvent containing~~ consists of a hydrofluorocarbon compound having an ether linkage.

Claim 19 (Currently Amended): The process for the recovery according to Claim 12, wherein the complexing agent that forms a complex with boron trifluoride in the boron trifluoride complex is comprises a polar compound.

Claim 20 (Original): The process for the recovery according to Claim 19, wherein the complexing agent is selected from a group consisting of water, alcohols, ethers, phenols, amines, ketones, aldehydes, esters, acid anhydrides, and acids.

Claim 21 (Currently Amended): The process for the recovery according to Claim 12, wherein the boron trifluoride complex is consists of a boron trifluoride-ether complex.

Claim 22 (Currently Amended): The process for the recovery according to Claim 12, wherein the reaction using comprising boron trifluoride or its complex as a catalyst is a dimerization reaction, an oligomerization reaction, a condensation reaction, or a polymerization reaction of an olefin.

Claim 23 (Currently Amended): A process for recycling ~~of the~~-a catalyst recovered
from a reaction, characterized by the process comprising:
~~reusing adding~~ the catalyst recovered by the process according to any Claims 11 to 19
~~for~~ to the reaction.

SUPPORT FOR THE AMENDMENTS

Claims 1-7, 9-12, 14-19, and 21-23 are currently amended.

The claims have been amended for editorial purposes, and in accordance with the Examiner's suggestions and standard U.S. patent practice.

Support for the amendments can be found throughout the specification, including the Examples, as originally filed.

No new matter has been added. Accordingly, entry of the amendments is requested.

Upon entry of the amendments, claims 1-23 will be pending in the present application.